

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
WO 2005/001670 A2

- (51) International Patent Classification<sup>7</sup>: G06F
- (21) International Application Number: PCT/ZA2004/000072
- (22) International Filing Date: 30 June 2004 (30.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- |         |                               |    |
|---------|-------------------------------|----|
| 03/5129 | 30 June 2003 (30.06.2003)     | ZA |
| 03/6980 | 8 September 2003 (08.09.2003) | ZA |
| 03/8654 | 6 November 2003 (06.11.2003)  | ZA |

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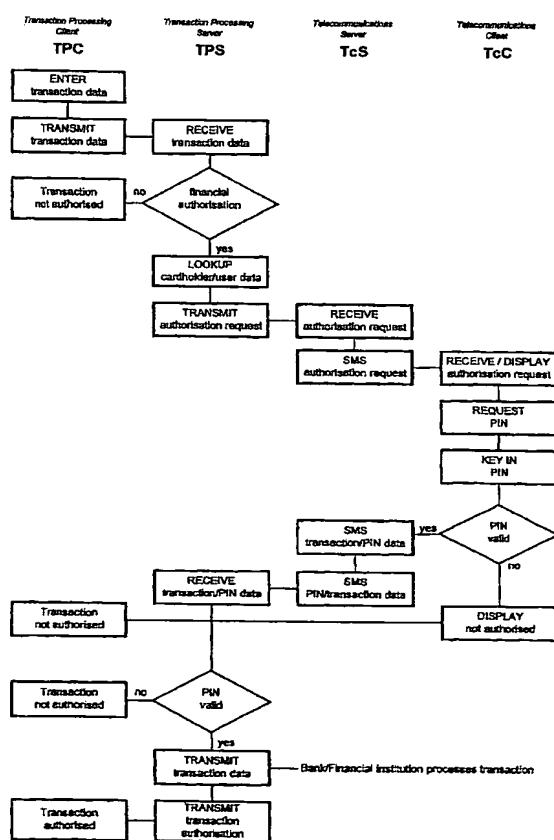
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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(54) Title: TRANSACTION VERIFICATION SYSTEM



(57) Abstract: This invention uses separate, parallel communication channels to authorise and authenticate a transaction. A primary data channel (PSTN, radio or the like) is used to communicate between the merchant terminal and the bank, and a parallel data channel (a mobile phone network for instance) is used for the authentication process. In the example, the transaction is initiated (on a primary data channel), using a POS terminal as a transaction processing client. The transaction processing server and financial services provider fulfill their normal functions. At this point, the process loops into a transaction authorisation component using the parallel data channel, that requires authentication of the transaction initiator (the card holder). In the example, communications on the parallel data channel are by way of SMS. In the authorisation process, the card holder receives an SMS requesting authorisation of the transaction. If the card holder is not the transaction initiator, the card holder can cancel the transaction. If the transaction can be authorised, an authentication process is initiated in which the mobile phone is programmed to require the entry of a normally secret code (such as a personal identification number (PIN)) that serves to authenticate the card holder and to give final authorisation of the transaction.

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(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- without international search report and to be republished upon receipt of that report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Declaration under Rule 4.17:**

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*